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BIOLOGICAL EVALUATION OF ROSEBUD, PACKSADDLE AND TEN BEAR PROGENY TEST SITES, SIX RIVERS AND KLAMATH NATIONAL FORESTS

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ABSTRACT

Three Regional Tree Improvement Program Progeny Test sites -- the Rosebud and Packsaddle on the Orleans Ranger District, Six Rivers National Forest, and the Ten Bear on the Ukonom Ranger District, Klamath National Forest -- were examined for insect and disease problems. Grasshoppers, woolly aphids, and engraver beetles were present at some sites but were not a problem. The only disease problem noted was the potential for Douglas-fir dwarf mistletoe infestation at Ten Bear. Pocket gopher activity and damage at Ten Bear was significant.

INTRODUCTION

The Rosebud and Packsaddle Progeny Test sites on the Orleans Ranger District, Six Rivers National Forest, and the Ten Bear Progeny Test site on the Ukonom Ranger District, Klamath National Forest, were examined on August 17 and 19, 1981. The objective of the examinations was to determine the presence of, or potential for, insect and disease problems which could affect the objectives of the Regional Tree Improvement Program. Observations of the three sites follow.

ROSEBUD

The site is located in the Rosalena area off of Road 13N18 on the Orleans Ranger District. The fenced and locked site was planted with Douglas-fir in the spring of 1980 and is within a healthy-appearing second growth stand

of Douglas-fir with scattered tanoak. No insect or disease problems were noted in the surrounding stand. In general, the planted Douglas-fir looked vigorous, with good growth, and no insect or disease problems were present.Rodent activity was not observed. No root pathogens were associated with Douglas-fir stumps present along the western boundary of the site. Some grasshopper activity was present but not at levels high enough to cause damage. Competition from other vegetation on the site was minimal. Volunteer Douglas-fir seedlings were coming in on the north end of the site which was cleared but not planted.

PACKSADDLE

This site is located within a previously established plantation (Pack-C) of Jeffrey pine and Douglas-fir trees 7 to 10 years old on Packsaddle Ridge, Orleans Ranger District. The area is to be cleared and planted with Douglas-fir in 1982. The existing plantation is heavily overgrown with weed and brush species, including manzanita, ceanothus, tanoak, live oak, madrone, gooseberry, chinquapin, and elderberry. Numerous large pine stumps remain from previous timber sales. The Jeffrey pines and Douglas-firs are generally healthy in spite of the brush competition. No disease problems were noted. A woolly aphid, probably Adelges cooleyi, is fairly common on the Douglas-fir, and some trees are heavily infested. Although woolly aphids are common and can cause a curling of needles and some needle drop, they normally are not threatening. Adult engraver beetles (Scolytus unispinosus) were present in one dead Douglas-fir. Grasshopper activity was low. Girdling due to rodent activity was evident on two Jeffrey pines. No insect or disease activity was noted in the second-growth Douglas-fir stand immediately south of the existing plantation.

TEN BEAR

The Ten Bear Progeny Test site is located on Road 15N17, approximately 15 miles east of the Ti Bar Station, Ukonom Ranger District, and is within an existing Douglas-fir plantation 8 to 10 years old. The area is to be cleared this fall and planted with Douglas-fir in 1982. Numerous Douglas-fir, white fir and sugar pine stumps were present from previous cutting. No root pathogens were associated with the stumps. The only insect activity noted was a low level of grasshoppers. Although grasshoppers were not causing any damage here, or at the Rosebud site, they can be of concern if population levels become unusually high. Manzanita, ceanothus, incense-cedar and other weeds were invading the site. Rodent activity, presumably pocket gophers, was quite high, as evidenced by numerous burrows, four dead Douglas-fir trees that had been girdled at the root crown, and openings in the plantation. The surrounding stand was a mixture of Douglas-fir and white fir. Dwarf mistletoe (Arceuthobium abietinum f. sp. concoloris) was noted on the white firs, but that species does not affect Douglas-fir. Some stem cankers were present on the white firs and top-kill, probably due to the fir engraver (Scolytus ventralis), was evident. Although Douglas-fir dwarf mistletoe (A. douglasii) was not observed in the vicinity of the test site, it was common about 100 to 200 yards east of the site. When the

site is cleared, an area 75-100 feet into the surrounding stand should be examined thoroughly for any Douglas-fir dwarf mistletoe infections. Infected trees should be removed to prevent spread of the parasite into the test site.